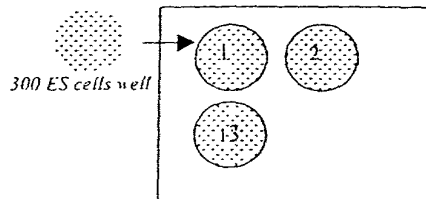
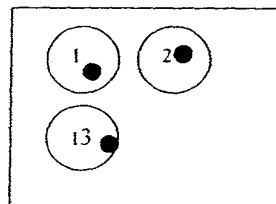


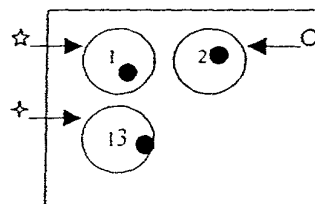
Day 0 R1 ES cells (300 cells/well)
in differentiating medium are
plated on 96 well non-coated plates



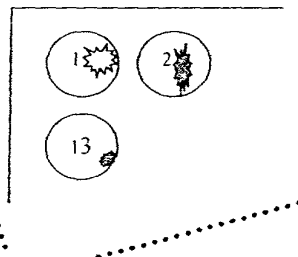
Formation of embryo-like aggregate (7 d)



Day 7 Add chemical compounds (#1 to #96) into each well.



Induce further differentiation (7~14 d)



Day 14 Extract RNA on the plate, RT-PCR on the plate

Day 21

Evaluate the effects of the drugs (#1-96) on
mRNA expression of tissue-specific genes (e.g.
albumin mRNA for hepatocyte differentiation).

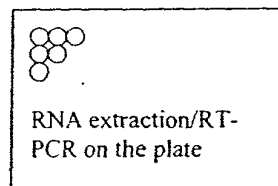


FIG. 1

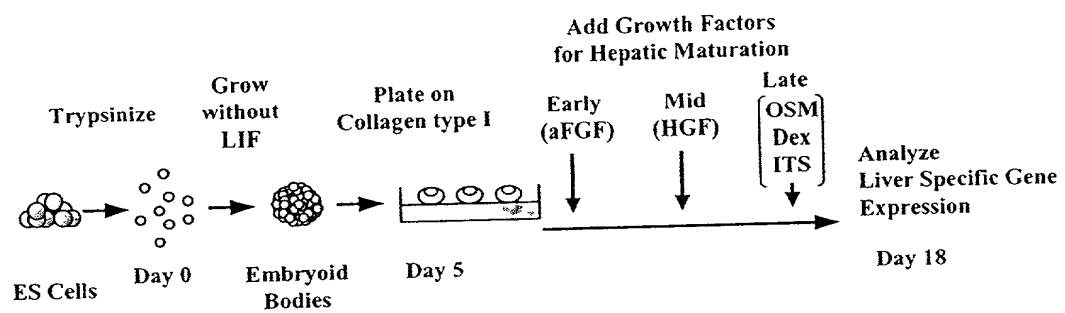


FIG. 2

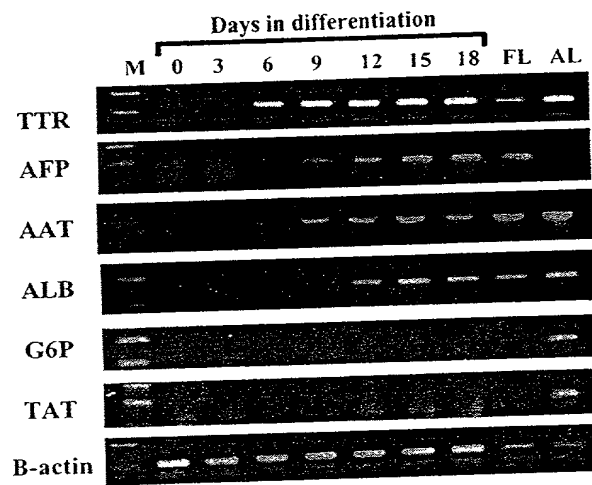


FIG. 3

Downloaded from www.physiology.org/journal/ajpcell by \$ from \$ on \$

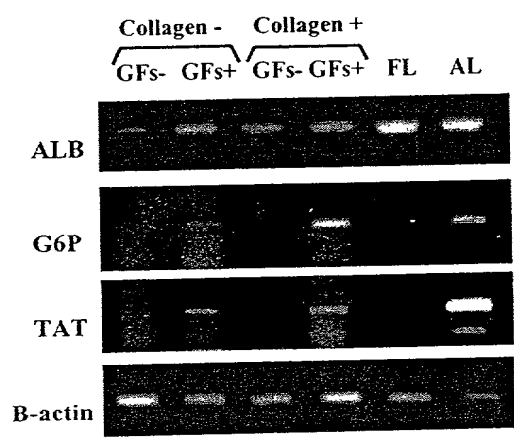


FIG. 4

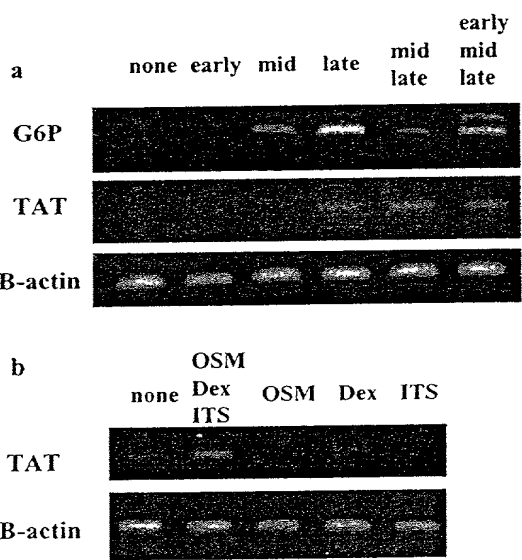


FIG. 5

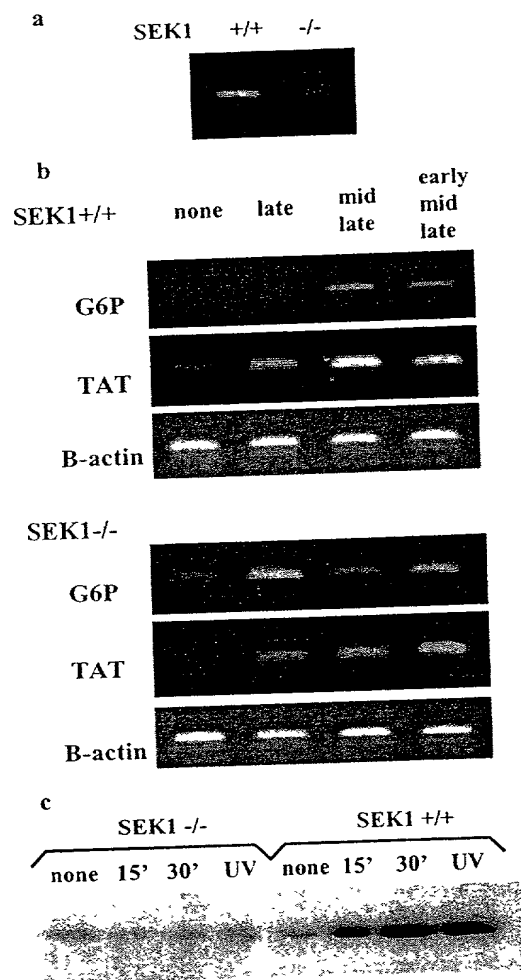


FIG. 6

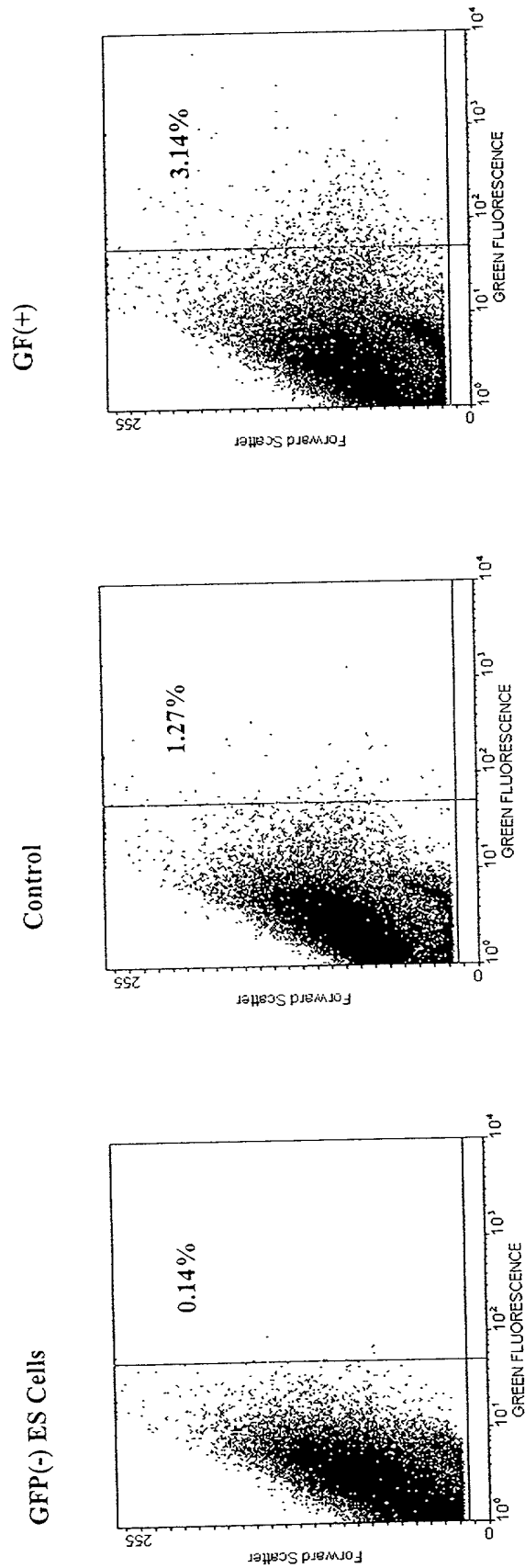


FIG. 7